

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method for detecting an object from its background or surroundings comprising the steps of:

viewing an area with a viewing device comprising a first filter and a second filter, while with the first filter selectively and varyingly changing the sensitivity of the viewing device to certain wavelengths of light (electromagnetic radiation) lying in the ultraviolet (UV) range such that the first filter passes visible light plus a variable bandpass of UV light, and ~~for~~ with the second filter selectively and varyingly changing the sensitivity of the viewing device to certain wavelengths of light (electromagnetic radiation) lying in the infrared (IR) range such that the second filter passes visible light plus a variable bandpass of IR light; and

determining the presence of an object when a visual difference between the object and background is discerned when the sensitivity of the viewing device is changed to pass a certain mixture of input of wavelengths of light in the UV range and/or the IR and visible light range, wherein the visual difference between the object and background is a difference in color or tonality.

2. (Original) The method of claim 1, wherein said determining includes determining the presence of an object when a visual difference is observed between the object and the background and when no discernable visual difference is observed when the sensitivity of the viewing device is changed to at least another mixture of wavelengths of light.

3-6. (Canceled)

7. (Currently amended) The method of claim 1 or 2 ~~any of claims 5-6~~ wherein at least a portion of the UV range is divided into a plurality of viewing bandpasses in said first filter, and wherein at least a portion of the IR range is divided into a plurality of viewing bandpasses in said second filter ~~dividing includes dividing at least a portion of the UV range and the IR range into a plurality or more viewing bandpasses.~~

8. (Currently amended) The method of ~~any of claims 5-6~~ claim 7 wherein ~~said dividing includes dividing~~ the first filter comprises the spectral range of the UV range divided into one or more viewing bandpasses and the second filter comprises the spectral range of the IR range divided into one or more viewing bandpasses.

9. (Currently amended) The method of claim 7 or 8 ~~any of claims 5-6~~ wherein ~~said dividing includes setting the bandwidth so each viewing bandpass has a width that is narrow enough so as to minimize contributions from other areas of the spectral region that would tend to mask the visual difference between the object and the background and wide enough to pass enough light/energy so as to make a difference in a display of a viewing device.~~

10. (Currently amended) The method of claim 7 or 8 ~~any of claims 5-6~~, wherein ~~said dividing includes arranging the viewing bandpasses are configured such that and setting the bandwidth of adjacent viewing bandpasses of the one or more viewing bandpasses such that the adjacent viewing bandpasses partially overlap.~~

11. (Currently amended) An apparatus for detecting an object from its background or surroundings comprising:

an electro-optical viewing device capable of detecting light in one of the ultraviolet (UV) range, the visible range, the near infrared or the far infrared; and

a mechanism, disposed between the object and the electro-optical viewing device, the mechanism comprising a first filter and a second filter, the first filter comprising at least a portion of the ultraviolet (UV) range divided into a plurality of viewing bandpasses, the second filter comprising at least a portion of the infrared (IR) range divided into a plurality of viewing bandpasses, the first filter being configured to pass visible light plus a variable bandpass of UV light and the second filter being configured to pass visible light plus a variable bandpass of IR light, the mechanism configured and arranged to selectively and varyingly change the bandpass of UV light and the bandpass of IR light ~~optical input to the electro-optical viewing device lying in the ultraviolet (UV) range and/or the infrared range,~~

wherein as the bandpass of UV light and bandpass of IR light optical input to the device are is varied, the device provides a visual difference between the color or tonality of the object and the background.

12. (Canceled)

13. (Currently amended) The apparatus of claim 11, wherein ~~the mechanism~~ includes:

— ~~a~~ the filter comprises ~~a~~ of a plurality of filter segments, the filter segments being configured and arranged so each view a different bandwidth of the ultraviolet (UV) range and ~~for~~ the infrared (IR) range; and

wherein the ~~a~~ mechanism further comprises means for one of selectively rotating, shifting or tilting the filter so as to successively position each filter segment at a light input end of the electro-optical viewing device.

14. (Currently amended) The apparatus of ~~any of claims 11-13~~ claim 11 or 13, wherein the electro-optical viewing device is one of a monochromatic image viewing device or a color image viewing device.

15. (Currently amended) The apparatus of ~~any of claims 11-13~~ claim 11 or 13 wherein the electro-optical viewing device is a color image viewing device and the an amount of light in each of the viewing bandpasses is successively and separately added into the image forming sensitivity of the color image viewing device.

17-19. (Canceled)

20. (Currently amended) The apparatus of claim ~~11-13~~ wherein each bandpass has a bandwidth of ~~width is~~ about 100 nm or less.

21. (Currently amended) The apparatus of claim ~~11-13~~ wherein each bandpass has a bandwidth of ~~width is~~ about 50 nm or less.

22. (Currently amended) The method of claim ~~9~~ 1 wherein each viewing bandpass has a bandwidth of about 100 nm or less.

23. (Currently amended) The method of claim ~~9~~ 1 wherein each viewing bandpass has a bandwidth of about 50 nm or less.